

Claims

WHAT IS CLAIMED IS:

1. An electrical connector comprising in combination a receptacle comprising a housing having a first face and a second face and a plurality of conductive means each extending from said first face to said second face and a header having a conductive housing comprising generally parallel end walls with opposed inner faces and a medial wall is interposed between said opposed parallel end walls, said medial wall having a first face and a second face wherein said first face of the medial wall is adjacent to the second face of the receptacle element and a plurality of passages extend between the first and second faces of the medial walls and a plurality of conductive signal pins pass through at least some of said passages and a separate grounding means is attached to the conductive housing of the header.
2. The electrical connector of claim 1 wherein the grounding means is releasably attached to the conductive housing of the header.
3. The electrical connector of claim 2 wherein the grounding means comprises at least one conductive pin.
4. The electrical connector of claim 3 wherein the conductive pin is fixed in a ground pin receiving recess in the conductive housing of the header.
5. The electrical connector of claim 4 wherein the conductive pin is press fit in the ground pin receiving recess.

6. The electrical connector of claim 3 wherein the grounding means comprises a plurality of conductive pins.
7. The electrical connector of claim 4 wherein each of the conductive pins is fixed in a ground pin receiving recess.
8. The electrical connector of claim 7 wherein the conductive pins are press fit in the ground pin receiving recesses.
9. The electrical connector of claim 1 wherein insulative means are positioned between the conductive signal pins and the medial wall of the conductive housing of the header.
10. The electrical connector of claim 9 wherein the ground pin receiving recess is on the medial wall.
11. The electrical connector of claim 10 wherein the ground pin receiving recess is positioned on the second face of the medial wall.
12. The electrical connector of claim 4 wherein there are a plurality of ground pin receiving apertures positioned on the second face of the medial wall.
13. The electrical connector of claim 1 wherein the housing of the receptacle abuts at least one of faces of the end walls of the conductive housing of the header.

14. The electrical connector of claim 13 wherein the housing of the receptacle includes an external metal shielding means.

15. The electrical connector of claim 14 wherein conductive means connect the external metal shielding means of the housing of the receptacle and at least one end wall of the conductive housing of the header.

16. The electrical connector of claim 15 wherein the conductive means connecting the external metal shielding means to at least one of the end walls of the conductive housing of the header are resilient conductive means.

17. The electrical connector of claim 16 wherein a pair of opposed metal springs extend inwardly from both of the opposed inner faces of the end walls of the housing of the header to contact the external metal shielding means of the receptacle.

18. The electrical connector of claim 17 wherein the opposed metal springs are removable from the opposed inner faces of the end walls of the housing of the header.

19. The electrical connector of claim 7 wherein the number of ground pin receiving recesses exceeds the number of ground pins so that the ground pins can be selectively positioned.

20. The electrical connector of claim 1 wherein the conductive signal pins and the grounding means of the header are attached to a printed wiring board.

21. The electrical connector of claim 20 wherein the conductive means of the receptacle is attached to a printed wiring board.

22. An electrical connector comprising in combination a receptacle comprising a housing having a first face and a second face and a plurality of conductive means each extending from said first face to said second face and a header having a conductive housing comprising opposed generally parallel end walls and a medial wall perpendicularly interposed between said opposed parallel end walls and said medial wall having a first face and a second face wherein said first face of the medial wall is adjacent to the second face of the receptacle element and a plurality of passages extend between the first and second faces of the medial walls and a conductive signal pin passes through at least some of said passages and a grounding means extends from the medial wall of the housing and a resilient conductive means extends from at least one of the end walls of the housing of the header to contact the housing of the receptacle.

23. The electrical connector of claim 18 wherein there is an external metal shielding means on the housing of the receptacle and the resilient conductive means extending from the housing of the header contacts said metal shielding means.

24. The electrical connector of claim 19 wherein a pair of opposed springs extend inwardly from both of the end walls of the housing of the header to contact the external metal shielding means of the receptacle.

25. A shielded header having a conductive housing comprising generally parallel end walls and a medial wall is interposed between said opposed parallel end walls, said medial wall having a first face and a second face wherein said first face of the medial wall is adjacent to the second face of the receptacle element and a plurality of passages extend between the first and second faces of the medial walls and a plurality of conductive signal pins pass through at least some of said passages and a separate grounding means is attached to the conductive housing of the header.

26. A shielded header having a conductive housing comprising opposed generally parallel end walls and a medial wall perpendicularly interposed between said opposed parallel end walls and said medial wall having a first face and a second face wherein said first face of the medial wall is adjacent to the second face of the receptacle element and a plurality of passages extend between the first and second faces of the medial walls and a conductive signal pin passes through at least some of said passages and a grounding means extends from the medial wall of the housing and a resilient conductive means extends from at least one of the end walls of the housing of the header to contact the housing of the receptacle.